

WHAT IS CLAIMED IS:

1        1. A method of generating test code for an automated test procedure  
2 applicable to a system comprising a plurality of interconnected elements, the method  
3 comprising the steps of:

4              defining a source file having a plurality of tags, each tag associated with a  
5 member of a library of executable code objects defining a set of instructions for  
6 performing a portion of the automatic test procedure;

7              generating a test plan in a conversational language from the source file; and  
8 generating the test code for the automated test procedure from the source file.

1        2. The method of claim 1, wherein the step of generating a test plan  
2 comprises the steps of :

3              translating the tags; and  
4              generating a conversational language phrase for each translated tag.

1        3. The method of claim 2, wherein the test plan comprises a test index  
2 identifying the system elements tested by the test code, the test index generated by  
3 performing the step of scanning the interpreted tags to identify the system elements  
4 tested by the test code.

1        4. The method of claim 2, wherein the step of generating a test plan  
2 further comprises the steps of:  
3              identifying an uninterpretable tag in the test plan; and  
4              appending the test plan with an error message identifying the uninterpretable  
5 tag.

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1        5. The method of claim 1, wherein the library of executable code objects  
2 comprises a first executable code object defining a set of instructions for performing  
3 method steps comprising the steps of:  
4              issuing a command to a commanded system element; and  
5              intercepting a message responsive to the command from the commanded  
6 element.

1        6. The method of claim 5, further comprising the step of:  
2              evaluating the message responsive to the command; and  
3              providing an error message according to the evaluated message.

1        7. The method of claim 1, wherein the step of generating test code for  
2 the automated test procedure comprises the step of translating the executable code  
3 objects associated with the tag in the source file.

1        8. An apparatus for generating test code for an automated test procedure  
2 applicable to a system comprising a plurality of interconnected elements, comprising:  
3              means for defining a source file having a plurality of tags, each tag associated  
4 with a member of a library of executable code objects defining a set of instructions  
5 for performing a portion of the automatic test procedure;  
6              means for generating a test plan in a conversational language from the source  
7 file; and  
8              means for generating the test code for the automated test procedure from the  
9 source file.

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1        9.     The apparatus of claim 8, wherein the means for generating a test plan  
2 comprises:

3              means for translating the tags; and

4              means for generating a conversational language phrase for each translated tag.

1        10.    The apparatus of claim 9, wherein the test plan comprises a test index  
2 identifying the system elements tested by the test code, wherein the test index  
3 generated by performing the step of scanning the interpreted tags to identify the  
4 system elements tested by the test code.

1        11.    The apparatus of claim 7, wherein the means for generating a test plan  
2 further comprises:

3              means for identifying an uninterpretable tag in the test plan; and

4              means for appending the test plan with an error message identifying the  
5 uninterpretable tag.

1        12.    The apparatus of claim 8, wherein the library of executable code  
2 objects comprises a first executable code object comprising:  
3              means for issuing a command to a commanded system element; and  
4              means for intercepting a message responsive to the command from the  
5 commanded element.

1        13.    The apparatus of claim 12, further comprising:

2              means for evaluating the message responsive to the command; and

3              means for providing an error message according to the evaluated message.

1        14.    The apparatus of claim 8, wherein the means for generating test code  
2 for the automated test procedure comprises means for translating the executable code  
3 objects associated with the tag in the source file.

1        15. A program storage device, readable by a computer, tangibly embodying  
2 at least one program of instructions executable by the computer to perform method steps  
3 of generating test code for an automated test procedure applicable to a system  
4 comprising a plurality of interconnected elements, the method comprising the steps of:

5              defining a source file having a plurality of tags, each tag associated with a  
6 member of a library of executable code objects defining a set of instructions for  
7 performing a portion of the automatic test procedure;

8              generating a test plan in a conversational language from the source file; and  
9 generating the test code for the automated test procedure from the source file.

1        16. The program storage device of claim 15, wherein the method step of  
2 generating a test plan comprises the method steps of:

3              translating the tags; and  
4              generating a conversational language phrase for each translated tag.

1        17. The program storage device of claim 16, wherein the test plan  
2 comprises a test index identifying the system elements tested by the test code, the test  
3 index generated by performing the step of scanning the interpreted tags to identify the  
4 system elements tested by the test code.

1        18. The program storage device of claim 16, wherein the step of  
2 generating a test plan further comprises the method steps of:  
3              identifying an uninterpretable tag in the test plan; and  
4              appending the test plan with an error message identifying the uninterpretable  
5 tag.

1        19. The program storage device of claim 15, wherein the library of  
2 executable code objects comprises a first executable code object defining a set of  
3 instructions for performing method steps comprising the steps of:  
4           issuing a command to a commanded system element; and  
5           intercepting a message responsive to the command from the commanded  
6 element.

1        20. The program storage device of claim 19, wherein the method steps  
2 further comprise the steps of:  
3           evaluating the message responsive to the command; and  
4           providing an error message according to the evaluated message.

1        21. The program storage device of claim 15, wherein the method step of  
2 generating test code for the automated test procedure comprises the method step of  
3 translating the executable code objects associated with the tag in the source file.

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